

# ATTACHMENT ONE

## Mission Statement for Biological Sciences Bachelor of Arts (B.A.) and Bachelor of Science Degrees (B.S.)

The mission of the biological sciences programs at Chaminade University of Honolulu includes a recognition of its Catholic/Marianist tradition and addresses the five principles that make Chaminade unique in its curriculum. Those principles are providing a quality education; educating for formation in faith; in maintaining family spirit; working towards service, peace, and justice; and preparing students for adaptation and change. The biology curriculum has successfully offered a broad based, quality education for years. This has resulted in our graduates successfully applying to graduate and professional schools, as well as employment in a community. Faith is involved in many educational pursuits and biology works unceasingly towards improving the human condition and society in which we live. The laboratory environment of the program encourages and fosters a family spirit amongst biology students and faculty. Additionally, many students and faculty offer their talents and skills in community service projects and voluntary experiences at health or scientific institutions. Finally, the very nature of science, including the cornerstone of the scientific method encompasses adaptation and change, fundamental components of a scientific and biological education.

### Program Outcomes for the B.A. and B.S. Degrees In the Biological Sciences

Upon completion of the B.A. or B.S. Degree program in the Biological Sciences, the student will demonstrate an understanding of the following.

1. The scientific method and its application in the Biological Sciences.
  - a. The skills and competencies in this area are conveyed to the student through the basic science courses. Upper division biology courses include in their course content discussions of the scientific approaches contained within their respective subdiscipline areas, e.g. genetics or ecology. Further experience to actual applications takes place in field experience and voluntary community service.
  - b. Relevant Courses: BI 203/203L, 204/204L, 210, CH 203/203L, 204/204L, 323/323L, 324/324L, PHY 151/151L, 152/152L
  - c. Support Courses: BI 287, Upperdivision Biology Courses, MA 210, 211, 331
2. Living organisms and their relationship to each other and the environment.
  - a. The student is exposed to the structure and function of living organisms through study of molecules, cells, tissues, systems, populations, and ecosystems. The diversity of living organisms will be presented to the student for consideration including, but not limited to Monera, Protists, Fungi, Plants, and Animal Kingdoms. With this exposure, the student will be prepared to make decisions concerning themselves and other living organisms.
  - b. Relevant Courses: Required courses for the B.A. and B.S. in Biology
  - c. Elective Courses: BI 103/103L, 110/110L, 115/115L, 130/130L, 131/131L, 151/151L, 162/162L, 331/331L, 353/353L, 362/362L, 363/363L, 454/454L
  - d. Support Courses: CH 203/203L, 204/204L, 323/323L, 324/324L, 360/360L, PHY 151/151L, MA 210, 211, 331
3. Theoretical and practical experiences in Biology.
  - a. Biological principles, based on theory, are taught in each biology course. These principles are enhanced by student projects in courses, directed research experiences both campus based and at external institutions, field work, and credit based volunteer experience in community and

professional organizations. This correlates the theoretical in coursework to the practical experiences in the biological field.

- b. Relevant Courses: Required courses for the B.A. and B.S. in Biology, BI 190, 287, 454/454L, 487, 496
- c. Elective Courses: as in 2 c.
- d. Support Courses: as in 2 d.

#### 4. Opportunities available in the Biology Discipline.

- a. There are specific courses in the Biology curriculum that include exposure to career and professional opportunities, e.g. BI 190-Pre-Med and Pre-Health Seminar, BI 287/487 Field Experience and BI 490-Senior Seminar. Students receive credit for voluntary work at community and professional organizations in specific career areas, e.g., a dentistry office for a pre-dental student. Students interested in elementary or secondary science education have specific courses to follow and secondary science teachers desiring to teach biology must major in biology. Additionally, students are provided information about different areas of Biology through a series of required major courses, like BI 370/370L-Cell & Molecular Biology.
- b. Relevant Courses: Required courses for the B.A. and B.S. in Biology, BI 190, 287, 487, 490
- c. Elective Courses: as in 2c.
- d. Support Courses: as in 2d. RI 2/14/06

### **Biology—Assessment Plan.**

#### **1. Individual Course Assessment:**

Individual progress through a given course is evaluated by at least 2 processes. Students are given a pre-test during the first class session and a post-test during the last week of classes. The same test is administered on both occasions. Questions are constructed to include areas listed in the course syllabus for which the student is expected to demonstrate competence. A typical pre and post test for BI 203-Cellular and Molecular Biology as well as a syllabus are appended. Further evaluations of the student's comprehension of the course materials are completed during the semester through traditional testing, either written, practical, and/or oral presentations. Assessments of the student's perception of the teaching of the instructor are completed using the student evaluation forms provided by Chaminade University of Honolulu.

#### **2. Assessment of Student Progress through the Curriculum:**

As courses in the Biological Sciences major are designed to be completed in sequence with educational cumulative in nature, a measure of a student's overall comprehension of theories and techniques is reflected in their continued success in the Biological Sciences Core Courses, e.g. BI 203/203L, 204/204L-Cellular & Organismic Biology and BI 351/351L-Comparative Vertebrate Anatomy sequential courses. Due to overlapping nature of the core courses, like CH 203/203L, 204/204L, 323/323L, and 324/324L, weaknesses exhibited by the student can be detected and possible remedies suggested. As the student completes the majority of the core courses, students can select elective courses allowing them to meet career goals, e.g., BI 362/362L-Microbiology elective for pre-med or graduate school prospective students.

In the past 4 years, a number of students have chosen to complete 2 science degrees. Biology alumni have graduated with a B.A. in biology and also with a B.S. in forensic science. Hence, these graduates have been assessed in both the biology and the forensic science disciplines.

External evaluations for those enrolled in the biology field experience courses, BI 287-Intro to Field Experience and BI 487-Field Experience are an additional means of assessment for students in these courses. Students are required to complete 45 hours at a participating institution or professional organization, such as Kaiser Hospital Emergency Department or Cancer Research Center of Hawaii, for one semester credit. The immediate supervisor of the internship provides a written evaluation of the student's competence and professionalism. In addition, the biology faculty mentor also provides an overall evaluation

based on the student's completion of reports, hours completed, supervisor's evaluation, and oral presentation to the university community.

### **3. Pre-Exit Assessment and Senior Portfolios:**

Junior and senior biology students are assessed in several ways. During their junior year or senior year, biology majors are required to enroll in BI 490-Senior Seminar, a course that includes constructing a resume, finding funding sources for graduate and professional studies, preparing a protocol for research, learning to do a literature search, and completing an oral presentation using powerpoint. In the senior year, biology seniors enroll in BI 499-Directed Senior Research, choose and complete a research project with a faculty mentor that culminates in a seminar presentation open to the university, and produce a research paper following accepted format in the biology field. Biology students who have completed summer research at extramural universities or organizations may have BI 499 waived, but must also present a videotaped seminar at our university and submit a paper.

A senior portfolio is another assessment instrument for biology seniors. Each senior is videotaped in an oral presentation, submits the presentation in a CD or disc, and submits a paper. These are retained by the biology discipline.

### **4. Post-Exit Assessment:**

One of the means of measuring success of a program is the employability or successful completion of a postgraduate program by graduates. The biology discipline has maintained records of its graduates through correspondence, surveys and newsletters. The biology discipline maintains a list of postgraduate universities and professional schools attended by biology graduates. In the future, survey forms will be developed to receive feedback from biology majors and graduates to determine strengths and weaknesses of the program. Especially helpful should be suggestions made by biology graduates, those within 1-2 years of graduation, on what aspects of their biology education were particularly helpful to them in their careers. National exam scores, e.g. GRE and MCAT, have also been discussed as possible assessment tools by the biology discipline.

### **5. Presentations at National Conferences as Assessment:**

In the past decade, a large number of biology students and biology faculty mentors have attended national conferences, e.g. SACNAS and ABRCMS, to present the results of their research. Since the abstracts of their research are refereed for acceptance as an attendee and presenter, this is a means to assess both student and program effectiveness.

## **Undergraduate Program Missions and Learning Outcomes**

### **Professional Studies Division**

#### **Program Mission for Undergraduate Business Majors**

#### **(Accounting, Business Administration)**

Our mission in providing undergraduate business programs at Chaminade is to prepare students to enter careers in industry, government, and not-for-profit organizations and to provide businesses in Hawaii with competent employees who are able to contribute to their organization's success and to the community good. In the business majors, students develop their ability to work with others effectively in professional settings and become skilled in using technology and information resources to make organizationally sound, socially responsible decisions at work. Business students gain an understanding of the functions that make organizations run effectively (accounting, finance, marketing), as well as the composition (structure and culture) and processes (operations and strategic management) of organizations that facilitate their success. Students broaden their awareness of the economic, social, and political issues that impact how business is conducted. And student prepare for careers in business generally, or in the field of accounting, depending on choice of major.

#### **Program Learning Outcomes Common to both Business Majors**

In completing a one of the business majors, a graduating student will have demonstrated the following competencies:

- 1) Written and oral communication abilities appropriate to business-related tasks.
- 2) The ability to select and use appropriate quantitative tools, including statistics and management science, for decision-making.
- 3) An understanding of tasks associated with career selection, entry, and management.
- 4) An understanding of the functional areas of business, including central theories, modes of analysis, tasks, and strategies.
- 5) The ability to use integrative and reflective thinking to assess and create business strategy appropriate for organizations in specified business environments.
- 6) An understanding of legal obligations of organizations and the ethical dilemmas faced by businesses, along with appropriate frameworks for addressing these dilemmas.
- 7) An understanding of information technology as it influences organizational processes and system tasks, and the ability to use information technology to address functional business tasks.
- 8) An understanding of domestic and global economic environments and their influence on firm-level organizational decision-making and operations.
- 9) An understanding of individual and group dynamics in organizations.

#### **Additional Program Learning Outcomes for Business Administration Majors**

In completing the major in business administration, a graduating student will have demonstrated the following competencies:

- 10) An understanding of the management of business operations, including product and process design, facilities layout, supply chain management, and quality control.
- 11) An understanding of the distinctive features and challenges of conducting business internationally.

#### **Additional Program Learning Outcomes for Accounting Majors\***

In completing the major in accounting, a graduating student will have demonstrated the following competencies:

- 12) An understanding of the legal and ethical responsibilities of professional accountants.
- 13) An understanding of the concepts, methods, and processes of control that provide for the accuracy and integrity of financial data and the safeguarding of business assets.
- 14) An understanding of the concepts of taxation and the impact of taxation on the financial and managerial decisions of business entities.
- 15) An understanding of the concepts, principles, and procedures of auditing and attestation services.

- 16) An understanding of Generally Accepted Accounting Principles and their application to business situations.
- 17) An understanding of the preparation, interpretation, evaluation, and use of financial information for business decision making.

### **Linkages between Business Coursework and Program Learning Outcomes**

#### **Courses for All Business Majors Program Learning Outcomes**

##### **Given Focus**

- BU 200 Introduction to Business 3, 4, 6, 8, 9
- BU 224 Applied Business Statistics 2
- AC 201 Principles of Accounting I 4
- AC 202 Principles of Accounting II 4
- EC 201 Principles of Macroeconomics 8
- EC 202 Principles of Microeconomics 8
- FIN 301 Principles of Finance 4
- MKT 301 Principles of Marketing 4
- MGT 305 Management of Information Resources 7
- MGT 306 Human Resource Management 4, 9
- BU 308 Professional Writing and Presentation 1
- BU 324 Quantitative Methods in Business 2
- BU 362 Legal and Ethical Issues in Business 6
- BU 416 Career Development 3
- BU 469 Business Strategy 5
- BU 470 Senior Field Project 5

##### **Additional Coursework for Accounting Majors**

- AC 301 Intermediate Accounting I 12, 13, 16, 17
- AC 302 Intermediate Accounting II 12, 13, 16, 17
- AC 303 Managerial Accounting 12, 13, 16, 17
- AC 306 Tax Concepts 14
- AC 404 Auditing 15
- AC 408 Governmental Accounting 12, 13, 16, 17

##### **Additional Coursework for Business Administration Majors**

- BU 402 International Business 11
- MGT 407 Operations Management 10

### **UNDERGRADUATE BUSINESS ADMINISTRATION PROGRAM ASSESSMENT PLAN:**

#### **External Assessment:**

1. Students take the ETS Major Field Exam in BU469, Business Strategy.

#### **Internal Assessment:**

1. Final case analyses in BU 469 are videotaped, and the tapes are on file in the business program office. Additionally, Senior Field Project (BU470) presentations are viewed live by the faculty, and the written project reports by student groups are kept on file in the business program office. Both case analyses and field projects are reviewed and discussed by the faculty as a group each term to assess for strengths and weaknesses in functional analysis, as well as in strategic conclusions and recommendations. Implications for course and program design are then devised by the faculty group as a whole.
2. Students completing BU469 take a Chaminade in-house exam.

## BACHELOR OF SCIENCE: SECONDARY EDUCATION

*ADAPT: The successful candidate evaluates elements of change in the grade 7-12 classroom and the wider world, and actively brings this awareness to work with students, faculty, and other members of the community.*

### Course Student Learning Outcomes for ADAPT

#### **ED460:** Intro to Exceptional Children

- Students will become familiar with the different categories and characteristics of exceptional children as identified by IDEA;
- Students will be able to write differentiated lessons plans using research based instructional strategies to address the needs of students with learning differences.

Evidence: Differentiation Plan

#### **ED470:** Technology for Teachers

- Students will demonstrate an understanding of multiple uses of technology to enhance their teaching;
- Students will create a grade appropriate interactive presentation.

Evidence: Interactive Presentations

#### **ED421:** Literature for Adolescents

- Describe the rationale, history, current research and theory in 7-12 language arts/literacy;
- Utilize diagnostic techniques to guide the planning process for 7-12 language arts/literacy;
- Use research-based pedagogical strategies and current standards to plan for differentiating and integrating 7-12 language arts/literacy throughout the curriculum

Evidence: Lesson Planning/Strategies

#### **ED423:** Teaching Strategies

- Analyze and apply teaching models and strategies that inform sound decisions to effectively plan lessons and units that are relevant and meaningful to students;
- Create individual lesson plans that incorporate differentiated instruction/assessment and reflections on various teaching strategies;

Evidence: Lesson Plans/Strategies

#### **ED427:** Teaching in Area of Specialization

- Develop a balanced, comprehensive unit plan that focuses on the learner, content in the area of specialization, outcomes and assessment plans, and an instructional blueprint that addresses the needs of all learner types in the classroom;
- Demonstrate an understanding of big ideas in content aligned with the 7-12 Hawaii State Content and Performance Standards;
- Teach relevant and significant lessons and activities to 7-12 students, then reflect on strengths, shortcomings, and areas of improvement.

Evidence: Unit Plan/Strategies

#### **ED490 A&B:** Seminar

- Candidates will reflect on their personal and professional growth relative to the ten Hawaii Professional Teaching Standards;
- Candidates will demonstrate the ability to integrate the Marianist values in education with relevance to creating a community of learners in the classroom and the wider community;
- Candidates will demonstrate an understanding of school law and its implications the teaching profession.

Evidence: Culminating Portfolio

## PROGRAM LEARNING OUTCOME—ENGLISH

Students who complete this program will demonstrate:

1. proficiency in writing through an analytical literary research paper.
2. proficiency in creative writing through an original production of poetry, fiction, or non-fiction.

3. the ability to define various literary critical approaches and apply them to given texts.
4. the ability to define, identify, and articulate major movements/periods in British and American literature.
5. the ability to critically analyze significant authors, texts, and issues in British and American Literature.

## **English—Assessment Plan**

### **1. Individual Course Assessment.**

Individual progress through a course is assessed by at least two processes. Individual course outcomes are linked to the program outcomes and provide data and course work examples in support of the skills and knowledge required in the program. First, faculty may use a pre-test during the first class session and a post-test during the last class session, or they may embed their assessment activities within the class activities and exams. Questions are constructed to cover the areas listed in the course syllabus for which the student should be able to demonstrate competence. The second mechanism of testing is more traditional, with regular quizzes and a final examination and/or final major paper.

### **2. Program Assessment (cumulative)**

The program assessment for the English Discipline Learning Outcomes has two methodologies: . Individual course outcomes are linked to the program outcomes and provide data and course work examples in support of the skills and knowledge required in the program. Cumulative data for the program assessment will be implemented and compiled in the Senior Seminar capstone course (EN 499).

Each student will submit a portfolio that contains the following:

1. An introduction letter (this letter will introduce the contents of the portfolio and detail how the contents meet the program learning outcomes. It should also include vocational goals and a reflection/projection of their continued learning process);
2. An analytical literary research paper with revisions (outcome 1);
3. An original work of poetry, fiction, or non-fiction (outcome 2);
4. A paper that applies a critical approach to a text(s) (outcome 3);
5. An essay that demonstrates student knowledge of one or several period(s) in British Literature. The student must cite specific authors and texts in his/her response. (outcomes 4 and 5);
6. An essay that demonstrates student knowledge of one or several period(s) in American Literature. The student must cite specific authors and texts in his/her response. (outcomes 4 and 5).

## **PSYCHOLOGY PROGRAM LEARNING OUTCOMES**

The model used for the undergraduate psychology program course structure/curriculum is based on the MSCP common core course structure/curriculum, which, in turn, is consistent with CACREP common core structure/curriculum which focuses on curricular experiences and demonstrated knowledge. Each common core area represents a program student learning outcome. The course work is not hierarchical in nature. All coursework is foundational. There is no evolution of any specific skill or competency over the course of the program through categories such as introductory, developmental and advanced.

Our principle component analysis (see undergraduate Psychology program evidence section at the WASC re-accreditation site) of the scales representing the first five Program Student Learning Outcomes (PSLO) from our comprehensive exam, which is administered in the capstone course Senior Seminar in Psychology (Psy 490), indicates that there is only one component (one PSLO) which we have labeled as **basic knowledge of psychology**.

#### **Program Student Learning Outcomes:**

Student will demonstrate an understanding of

#### **1. The Scientific Method and its Application in the Field of Psychology**

a. Skills and competencies in this area are primarily developed in the required courses of PSY 315 Statistics and PSY 316 Research Methods in Psychology. They are also addressed in all psychology courses. **Six Credits.**

#### **2. Life Span Development**

a. Skills and competencies in this area are primarily developed in the required courses of PSY 200 Life Span Development, PSY 321 Personality, and PSY 424 Abnormal Psychology. **Nine Credits.**

#### **3. Applied Psychology**

a. Skills and competencies in this area are primarily developed in the required courses of PSY 434 Organizational Psychology and PSY 451 Health and Stress Psychology. **Six Credits.**

#### **4. Counseling Theory**

a. Skills and competencies in this area are primarily developed in the required course of PSY 406 Counseling Psychology. **Three Credits.**

#### **5. Social and Cross-Cultural Psychology**

a. Skills and competencies in this area are primarily developed in the required course of PSY 322 Social Psychology. With the exception of PSY 315 Statistics, cross-cultural issues are discussed in all classes. **Three Credits.**

The classification of psychology courses as being at the 100, 200, 300 or 400 level is a historical artifact of a university system that appears to have adopted a mathematical model that assumes skills/competencies at one level must be mastered before moving on to a more advanced level of the same skills/competencies.

This is not the case for the psychology program.

The course General Psychology (Psy 101) is a required pre-requisite for all psychology courses. This is a university policy. This course is not part of the Psychology program. The function of this course is to develop and assess the skills and competencies for the General Education Core requirement of demonstrating an understanding of the Behavioral Sciences.

Psychology 315 *Behavioral Sciences Statistics* is a pre-requisite for Psychology 316 *Research Methods in Psychology*. Psychology 316 is not an advanced course in statistics. We offer two separate courses because the material required to understand research, which is the primary focus, is best delivered in this format.

Psychology 406 Counseling Psychology requires that additional pre-requisite of Psychology 321 Psychology of Personality. Psychology 406 is not an advanced course in personality. We require Psy 321 as a pre-requisite because the material required to understand counseling is best delivered in this format.

The remaining two Program Student Learning Outcomes are also assessed in the capstone course Psychology 490 Senior Seminar in Psychology. Once again neither of these Program Student Learning Outcomes is hierarchical in nature. They do not represent an evolution of any specific skill or competency over the course of the program through categories such as introductory, developmental and advanced. The both assess basic knowledge of psychology.

The rubric for the Integrative Paper, for which inter-rater reliability has been established (see undergraduate Psychology program evidence section at the WASC re-accreditation site), will be used starting Spring 2010 to assess the following two outcomes:

#### **6. Psychology as an Integrated System**

a. Skills and competencies in this area are primarily developed in the required course of PSY 490 Senior Seminar in Psychology. **Three Credits.**

#### **7. Specific Focuses in Psychology**

a. Skills and competencies in this area are primarily developed in the three required elective courses in Psychology. **Nine Credits.**

### **Undergraduate Psychology Department Assessment Plan**

**Course assessment** occurs through a variety of measures depending upon the preference of the faculty. All assessment however is directly related to and assesses course student learning outcomes as indicated in the syllabus. Each of the courses are linked to program student learning outcomes and develops the appropriate skills and competencies for program student learning outcomes via the course student learning outcomes. This assessment occurs throughout the course.

**Program assessment** is cumulative and occurs in the capstone course Psychology 490 Senior Seminar in Psychology. This course is offered once a year during the Spring Day term and once or more a year, depending on need, in the evening program (AEOP). This capstone course collaboratively explores the relationship between the core and elective psychology courses for students majoring in psychology. This course guides the student toward developing an understanding of the relationship and application of the course work they have taken in the field of psychology.

#### **Assessment Tools administered in PSY 490 Senior Seminar in Psychology**

1. A research paper that integrates the core and elective courses, within the context of program student learning outcomes, relative to a common thread (evolutionary theory) weaving through the field of psychology.\
2. A paper that examines the relationship between the field of psychology and the five Marianist Educational Values.
3. A 55 item multiple choice comprehensive exam that covers the program student learning outcomes.
4. An exit survey

Program assessment assesses the following program student learning outcomes.